## **REMARKS**

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Official Action dated May 18, 2004. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

## Status of the Claims

Claims 1-10 are pending in this application. Claims 1 and 7 have been amended. New claim 10 has been added. More specifically, claims 1 and 7 have been amended to more clearly define Applicants' invention over the prior art of record.

In Paragraph 1 of the Detailed Action, the Examiner objected to the drawings as failing to comply with 37 CFR 1.84(p)(5). In response, the Applicants respectfully direct the Examiner to the Preliminary Amendment filed on January 21, 2004 wherein the specification was amended. Specifically, paragraphs 2, 6, 32, 34, 41, 44, 45, 59, 60, 61, 66, 67, 68, 69 and 73 were amended in the Preliminary Amendment.

Support for the last line added to paragraph 68 is found in the description of the "restoring signal" (RS) in paragraph 59 and in Figs. 4 and 6.

Regarding Fig. 1A and Fig. 8, BL2B and BL3B are referred to as "BL0B, BL1B... BL510B, BL511B, etc." and BL2T and BL3T are referred to as "BL0T, BL1T...BL510T, BL511T, etc." in paragraph 32 as amended. MI02T/B are referred in the last sentence of paragraph 35 which expressly states that the short-hand notation "T/B" stands for T and B. BLF0T and BLF0B are referred to in paragraph 36 as BLF0T/B.

With respect to Fig. 1B, the terms "PROBABLE RANGE", "WLO IN TOTAL", "NO ENCODING" and "PRESENT INVENTION WITH ENCODING" are referred in paragraphs 44 and 45, as amended. The reference signs MCB0 and MCB1 are also referred to in paragraph 45, as amended.

With respect to Fig. 4, MN5 is referred to in paragraph 60. The reference signs MIO1T, MIO1B, MIO255T, MIO255B are referred to in paragraph 59, as amended. MIOFT, MIOFB, MIONT, MIONB, BNO, BN1 are referred to in paragraph 61, as amended. The reference signs RE1B, RE1T, RE255B, RE255T are also referred to in paragraph 59, as amended. The reference signs YS1 and YS255 are referred to in paragraph 60, as amended. The reference sign MN6 is

referred in paragraph 61, as amended.

With respect to Fig. 5, the reference signs REI254T and REI255B are referred in paragraph 62 as REI0T, REI2T, etc. and REI1B, REI3B, etc.

Regarding Fig. 6, all the reference signs therein are referred to in paragraphs 59 and 66-68, as amended.

With respect to Fig. 7, the reference sign REGCNTL is referred to in paragraph 69, as amended. Support for such amendment is found in Fig. 7. The reference sign FLG is referred in paragraph 73, as amended.

Regarding Fig. 9B, the reference symbols BL0B, BL2B, BL0T, BL2T, WL1, WL2 and BL1B are referred to in paragraph 5 and paragraph 6, as amended.

In view of the amendments to the specification and the above remarks, Applicants respectfully submit that the objections to the drawings have been overcome.

In Paragraphs 2 and 3 of the Detailed Action, the Examiner rejected claims 1-9 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. More specifically, the Examiner stated that the claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. Applicants respectfully submit that in view of the amendments made to the specification in the preliminary amendment, the Examiner's rejection in Paragraph 3(A) of the Detailed Action has been overcome. With respect to in Paragraph 3(B) of the Detailed Action, Applicants respectfully submit that the feature recited in claim 9 is described in the specification in paragraphs 21, 48-56 and in FIGS. 3A, 3B, 3C and 3D. Thus, Applicants respectfully submit that the rejection of claims 1-9 under 35 U.S.C. 112, first paragraph, has been overcome.

In Paragraph 5 of the Detailed Action, the Examiner rejected the claim 7 under 35 U.S.C. 112, second paragraph, as being indefinite. Claim 7 has been amended to clarify that the command decoder detects the Activate, Read and Write commands based on the signals. Thus, Applicants respectfully submit that the rejection of claim 7 under 35 U.S.C. 112, second paragraph, has been overcome.

In Paragraph 7 of the Detailed Action, the Examiner rejected the claims 1-9 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,721,194. To overcome this rejection, a terminal disclaimer along with the required fee are submitted herewith.

In Paragraph 9 of the Detailed Action, the Examiner rejected the claims 1-2, 5-7 and 9

under 35 U.S.C. 103(a) as being unpatentable over Szczepanek, 4,959,811, in view of Williams et al., 6,400,626. Applicants respectfully traverse this rejection. Claim 1 has been amended to clarify that the plurality of the input/output lines transfer data from the encoders to the plurality of sense amplifiers and from the plurality of sense amplifiers to the encoders. Szczepanek, 4,959,811, shows in FIG. 1 thereof that the ENCODER 9 outputs data to DATA BUS 2, but that ENCODER 9 does NOT input data from DATA BUS 2. Szczepanek also fails to teach that data outputted from ENCODER 9 is written into the RAM 1. Thus, the combination of Szczepanek and Williams et al. fails to render any of claims 1-2, 5-7, 9 or new claim 10 unpatentable under 35 U.S.C. 103(a).

Applicant respectfully submits the claims are allowable over the cited prior art and requests that the outstanding rejections be withdrawn.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicant's undersigned representative at the address and phone number indicated below.

Respectfully submitted,

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